# Benchmarking Education

October 2021

Thomas Toth, CFA – Managing Director Ali Kazemi – Managing Director Prepared for



Wilshire

# Purpose

- Serves as a <u>clear</u> and <u>objective</u> means of evaluating performance.
- Benchmarks provide investors a realistic and achievable starting point – i.e. the passive portfolio held in the absence of a view on any given security
- The purpose of benchmarking can be summarized as follows:

Performance Attribution

Decomposition of sources of return, such as asset allocation, active vs. passive management, manager skill, etc.

Insight on Risk/Returns

Insight into level of risk being taken to generate return and the volatility of return over time

Manager Evaluation

Measure against which manager performance can be evaluated to assist in retention / termination decisions

### Benchmark Selection Considerations

Total Fund Benchmark

Does it appropriately match the plan sponsor's investment philosophy and objectives and reflect the overall structure of the fund?

Asset Class Benchmark

Does it reflect a broad universe of investment opportunities in an asset class and offer a "target" for combining multiple managers within the asset class?

Manager Benchmark

Does it appropriately reflect the objective of the strategy and is it consistent with the asset class objective?

### Ideal Benchmark Characteristics

Unambiguous

Benchmark components and construction methodology are clearly identifiable.

Investable

It is possible to replicate and simply hold the benchmark.

Measurable

The benchmark's return is readily calculable on an on-going basis.

Appropriate

The benchmark is consistent with the composite's objective or manager's investment style.

Reflective of current investment options

The manager is knowledgeable of the securities or factor exposures within the benchmark.

Pre-specified

The benchmark is agreed upon prior to the start of the monitoring period.

Source: CFA Institute

# Appropriate Benchmarks

- The appropriate benchmark is a function of the return and risk characteristics of the asset class or portfolio being measured
- Benchmarks may be published market benchmarks or custom benchmarks
  - Published benchmarks are preferable
  - Generally, asset class benchmarks are published market indices which represent a broad investment opportunity set
    - E.g., Wilshire 5000, Bloomberg U.S. Aggregate
- Objective of benchmark selection process is to minimize benchmark "misfit" risk, which is uncompensated risk
  - "Misfit" risk is the return difference attributable to the benchmark characteristics that are not reflected in the portfolio and vice versa
    - E.g., All cap equity portfolio benchmarked to the S&P 500 Index or a Core Plus bond portfolio benchmarked to the Bloomberg U.S. Aggregate
- Wilshire is comfortable that the composite and individual manager benchmarks comport with best practices

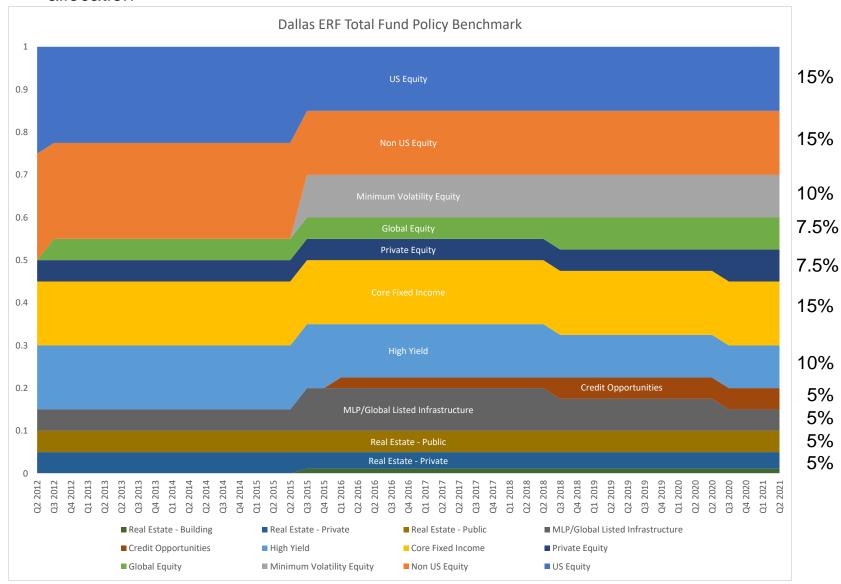
- Infrequent adjustments might be warranted given evolving capital markets

# Benchmarking Private Assets

- Benchmarking private assets is not as straightforward as public assets
  - Available private asset "benchmarks" from industry providers are actually universe comparisons, either of private market funds or other plan sponsor private programs
    - Not investable in the same manner as public indexes
    - Underlying constituents can shift depending on data availability
    - Data availability is limited to quarterly periodicity
- For private real estate, Dallas ERF uses NCREIF indexes
- For private equity, Dallas ERF uses a blend of public benchmarks that are adjusted for timing and include a premium to account for illiquidity
  - While not investable, they offer a reasonable comparison for evaluating performance

# Total Fund Benchmarking

- Total Fund Policy Benchmark
  - Weighted blend of the asset class benchmarks that aligns with the Board approved asset allocation



#### WILSHIRE CONSULTING

### IMPORTANT INFORMATION

This material contains confidential and proprietary information of Wilshire Advisors, LLC (Wilshire), and is intended for the exclusive use of the person to whom it is provided. It may not be disclosed, reproduced or redistributed, in whole or in part, to any other person or entity without prior written permission from Wilshire. Third party information contained herein has been obtained from sources believed to be reliable. Wilshire gives no representations or warranties as to the accuracy of such information, and accepts no responsibility or liability (including for indirect, consequential or incidental damages) for any error, omission or inaccuracy in such information and for results obtained from its use. Information and opinions are as of the date indicated, and are subject to change without notice.

This material is intended for informational purposes only and should not be construed as legal, accounting, tax, investment, or other professional advice.

This report may include estimates, projections and other "forward-looking statements." Due to numerous factors, actual events may differ substantially from those presented.

Wilshire® is a registered service mark of Wilshire Advisors, LLC, Santa Monica, California. All other trade names, trademarks, and/or service marks are the property of their respective holders.

Copyright © 2021 Wilshire Advisors, LLC. All rights reserved.

#### **DISCUSSION SHEET**

# Employees' Retirement Fund Board of Trustees Meeting

October 12, 2021

**Issue:** Global Bond Investment Manager RFP & Rebalancing

Attachments: None

**Discussion:** ERF staff has developed a Global Bond RFP (Request for

Proposal) to be posted for responses from investment managers. This search will help fulfill the allocation currently in an index fund after the Aberdeen Global Bond strategy

was closed by the manager.

#### **Proposed Timeline:**

- October 15<sup>th</sup> Global Bond RFP issued
- November 12<sup>th</sup> RFP submission due date
- January 11<sup>th</sup> Submit manager names recommended for on-site (or virtual) due diligence to the Board
- February/ March Manager due diligence
- April 12<sup>th</sup> Final manager presentations made to the Board and manager selection made

ERF also recommends rebalancing our Bond managers to a more equal allocation of one-third for each manager: Garcia Hamilton; Securian; and a new manager to be approved by the Board. The allocation for each manager would range between 4% to 5% each. Staff consulted with Wilshire on both the RFP and the rebalancing.

**Recommendation:** Suggest

Suggested motion for the approval is as follows: Move to approve the issuance of the Global Bond RFP and begin work along the recommended timeline; and rebalance Bond managers to an equal allocation upon new manager selection.

October 17 - 20, 2021

### **Global Conference**

Charting a New Course

# **Charting a New Course**

The Milken Institute Global Conference convenes the best minds in the world to tackle its most urgent challenges and to help realize its most exciting opportunities. It is a unique experience in which individuals with the capital, power, and influence to change the world connect with those whose expertise and creativi

1 of 7 10/6/2021, 9:50 AM

are reinventing health, finance, technology, philanthropy, industry, and media. The 24th annual Global Conference will center on the theme, "Charting a New Course." In recent months, the impact of social crisis economic dislocation, and global pandemic has called us to reflect on how we live, what we believe, and wh matters most. In October, we will focus on how the disruptions and innovations of the recent past can be reframed for a thriving future. Join us as we engage with our catalytic community to share the adversities and achievements of living through this moment in history – translating lessons learned and rebuilding meaningful, healthy, and prosperous lives for all.



### **COVID-19 Safety Precautions**

We consider the health and safety of all onsite Global Conference 2021 attendees as our top priority. A large number of the sessions will be held in covered but openair venues and there will be significant outdoor space available for networking.

READ MORE ABOUT OUR COVID-19 CONSIDERATIONS

2 of 7 10/6/2021, 9:50 AM

# **See the Speaker Lineup**

View our speaker lineup. We are adding speakers daily. Check back often.

**EXPLORE SPEAKERS** 





# 2,000+ Participants

Representing more than 70 countries.

3 of 7 10/6/2021, 9:50 AM



### **Global Reach**

Video sessions and coverage across global news outlets and social media networks generating billions of impressions.



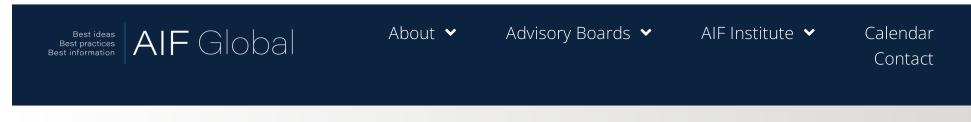
**POLITICO** 

### **GLOBAL INSIDER**

Subscribe to a special edition of the "Global Insider" newsletter to get insights from Global Conference.

**SUBSCRIBE NOW** 

4 of 7 10/6/2021, 9:50 AM



#### Calendar

### 2021 AIF Women Investors' Forum



### 2021 AIF Women Investors' Forum

October 19–21 | Connecting Investors Globally | Live Online

The interactive, three-day format will provide a flexible framework of invaluable resources, education, and networking for women investors. **The forum is open to both men and women investment professionals.** 

Programming will feature asset-class roundtable sessions devoted to Private Equity, Private Credit, Diversifying and Opportunistic Strategies, Real Estate and Infrastructure Investing. In addition, special panel and featured sessions will include:

- CIO and Investor Roundtable Discussion
  Lessons Learned from COVID-19 and Beyond
- Actionable Business Models for Advancing Diversity, Equity, and Inclusion (DEI)

Featured Panel Discussion from Corporate Sector and Asset Management Leaders who are Taking Revolutionary Actions to Impact Diversity from within their Organizations

• Introduction of the AIF Institute Center for Financial Innovation

Transformation of the Investment Industry with Digitization

 AIF Institute Center for ESG and Sustainable Investing Primer and Workshop

Exploring Actionable Portfolio Construction

• The ILPA Diversity in Action Initiative

Special Data Presentation and Breakout Group Discussions

Register for the 2021 AIF Women Investors' Forum

Agenda at a Glance



### Day One: Tuesday, October 19

11:00–11:15 a.m. EDT Welcome and Introductions

Welcome:

2 of 16 10/6/2021, 9:48 AM

- Brant Maller, Founder and CEO, AIF Global
- Melissa Waller, President, AIF Institute

#### 11:15 a.m.–12:00 p.m. EDT

The CEO's Perspective: Growth and Innovation—Embracing Technology for a New Generation of Investors

Keynote Speaker:

• Adena Friedman, President and Chief Executive Officer, Nasdaq

Interviewed by:

• Alisa A. Wood, Partner, KKR

#### 12:15-1:15 p.m. EDT

**Private Equity Session** 

Session Leaders:

- Sondra Vitols, Director, New York-Presbyterian
- Michelle Davidson, Co-Head of Advisory, Americas, Aksia

3 of 16

#### Session Participants:

- Adriana Ballard, Portfolio Manager, Private Equity, Employees
   Retirement System of Texas
- Ashley DeLuce, Vice President, Private Equity, Callan

1:30-2:30 p.m. EDT

Diversifying and Opportunistic Strategies Session

Session Leader:

• Julia Mord, Deputy Chief Investment Officer, **Tulane University Investment Management Office** 

2:45-3:45 p.m. EDT

Investors Roundtable: Lessons Learned from COVID 19 and Beyond

Moderator:

 John Skjervem, Principal, Chief Executive Officer, and Director of Consulting, Alan Biller and Associates

Panelists:

• Kathleen E. Jacobs, Chief Investment Officer, New York University

 Angela Miller-May, Chief Investment Officer, Illinois Municipal Retirement Fund

4:00–5:00 p.m. EDT

Center for Financial Innovation Panel: Transformation of the Investment Industry with Digitization

Panelist:

• Martin Beaulieu, Advisory Board Member, **Convergency Partners** 

### Day Two: Wednesday, October 20

11:00 a.m.-12:00 p.m. EDT

Keynote Fireside Chat: 21st Century Business Leadership

Featuring:

• Yie-Hsin Hung, Chief Executive Officer, **New York Life Investment**Management

Interviewed by:

George Walker, Chairman and Chief Executive Officer, Neuberger
 Berman

12:15–1:15 p.m. EDT

Private Credit Session I: Core Strategies

Panelist:

• Catherine Beard, Senior Vice President, Callan

1:30-2:30 p.m. EDT

Private Credit Session II: Specialized Strategies

Session Leader:

• Catherine Ulozas, CIO, Drexel University

2:45-4:00 p.m. EDT

AIF Institute Center for ESG and Sustainable Investing Primer and Workshop: Exploring Actionable Portfolio Construction

Panelist:

• Dana Johns, Senior Portfolio Manager, Maryland State Retirement

#### and Pension System

5:30–8:30 p.m. EDT (NYC Event)

4:30–6:30 p.m. CDT (Austin Event)

Reconnecting Reception—In Person (RSVP required to attend)

Locations:

- Midtown New York City
- Downtown Austin, Texas

### Day Three: Thursday, October 21

11:30 a.m.–12:00 p.m. EDT

KPMG Women in Alternative Investments Management Report

12:00-1:00 p.m. EDT

Leading Initiatives for Actionable DEI Models

Panelists:

- Raelan Lambert, Global Alternatives Leader, Mercer
- CoCo Brown, Founder and CEO, Athena Alliance

7 of 16 10/6/2021, 9:48 AM

1:15-2:15 p.m. EDT

Real Estate Investing Session

Session Leaders:

• Jinglin Huang, Associate Director, **Segal Marco Advisors** 

2:30-3:30 p.m. EDT

Infrastructure Investing Session

Session Leaders:

- Petya Nikolova, Head of Infrastructure Investments, New York City
   Retirement System
- Karen Rode, Partner, Aon Hewitt Investment Consultants

3:45-4:45 p.m. EDT

The ILPA Diversity in Action Initiative: Special Data Presentation and Breakout Group Discussions

Session Leaders:

Lauren Dillard, Executive Vice President of Investment Intelligence,
 Nasdaq

• Jennifer Choi, Managing Director, Industry Affairs, ILPA

4:45–5:00 p.m. EDT

Closing Remarks

### 2021 AIF Women Investors' Forum Confirmed Participants List

The investors and consultants below have confirmed their desire to participate (subject to any required internal approvals and final schedules)



#### **Aflac Global**

Ksenija Jovanovic, Vice President

#### **AIG**

Milla Tonkonogy, CIO, General Insurance North America

#### **Albourne Partners**

John Claisse, CEO Maureen Hart, Head of Client Account Management, Partner Jennifer Kizibash, Partner

Arabella Wuchek, Partner

#### **Aksia**

Michelle Davidson, Co-Head of Advisory, Americas

#### **Alan Biller and Associates**

John Skjervem, Chief Executive Officer and Director of Consulting

#### **Andrew W. Mellon Foundation**

Annette Phillips, CHRO

#### **Aon Investments**

Karen Rode, Partner Lila Han, Associate Partner

#### **Brighthouse Financial**

Maria Tarhanidis, Head of Alternative Investments

#### **Callan LLC**

Catherine Beard, Senior Vice President Sara Hakim, Senior Vice President Ashley DeLuce, Vice President

#### **Casoro Group Education Foundation**

Jessica Lee-Wen, Board Member

#### **Cigna Investment Management**

Samantha Hershberger, Fixed Income Director

#### **CommonSpirit Health**

Jamie Lu, Manager, Investments

#### **Connecticut Office of State Treasurer**

Jessica Weaver, Corporate Governance Analyst

#### **Delta Airlines Pension**

Amanda Cogar, Director - Pensions

#### **Employees Retirement System of Texas**

Adriana Ballard, Portfolio Manager

#### Fort Worth Employees' Retirement Fund

Christina Wu, Investment Officer

#### **Future Fund**

Alicia Gregory, Head of Private Equity

#### Illinois Municipal Retirement Fund

Angela Miller-May, Chief Investment Officer

#### **JANA Investment Advisers**

John Coombe, Executive Director

#### Los Angeles City Employees' Retirement System (LACERS)

Ellen Chen, Investment Officer Bryan Fujita, COO, Investments Clark Hoover, Investment Officer

Wilkin Ly, Director of Private Market Assets

#### Los Angeles County Employees' Retirement Association (LACERA)

Cheryl Lu, Investment Officer

#### **Maryland State Retirement and Pension System**

Dana Johns, Senior Portfolio Manager

#### **M&G Investments**

Sara Almosawi, Diversifying Strategies Analyst Amy Coleman, Investment Analyst

#### **Manhattan Life Insurance Company**

Teresa Moro, Senior Vice President

#### MassMutual

Hanna Snow, Investment Research Consultant

#### Mercer

Beth Johnson, Partner Cori Trautvetter, Partner Raelan Lambert, Global Alternatives Leader

#### MetLife

Agata Rzamek Praczuk, Director

#### **MUFG**

Gila Cohen, Real Estate and Private Equity

#### **National Gallery of Art**

Christine Kelleher, Chief of Investments

#### **New York Presbyterian Hospital**

Sondra Vitols, Director

#### **New York City Retirement System**

Petya Nikolova, Head of Infrastructure Investments Susannah Vickers, Assistant Comptroller Pensions / Designated Trustee

#### **New York University**

Kathleen Jacobs, Chief Investment Officer

#### **NPR**

Lis Lang, Assistant Treasurer, Senior Director

#### **Oregon State Treasury**

Faith Sedberry, Investment Officer

#### **Public Employees Retirement Association of New Mexico**

Katherine Brassington, Investment Associate

#### **Segal Marco Advisors**

Jing Lin Huang, Associate Director Maureen O'Brien, Vice President Rosa Limas, Vice President Vanessa Vargas Guijarro, Vice President

#### **State Board of Administration of Florida**

Sara Geiger, Portfolio Manager

#### **State of New Jersey**

Ting Yang, Investment Analysts

#### **State of Wisconsin Investment Board**

Ashley Anderson, Investment Operations Analyst Cora Shi, Analyst Tracy Wheeler, Investment Operations Analyst Zhenping Wang, Macro Analyst

#### **Stellantis**

Debbie Kozole, Manager, Public Equities

#### **Teacher Retirement System of Texas**

Jennifer Wenzel, Director
Catherine Cagley Beaudoin, Senior Associate – Real Assets
Benjamin Bayles, Associate
Joyce Chow, Director
Grant Walker, Senior Director
Alexandra Cain Wildeson, Private Equity Funds Senior Analyst
Heidi Piper, PE

#### **TelstraSuper**

Caroline Stuart, Investment Analyst

#### **Tennessee Consolidated Retirement System**

Daniel Crews, Director of Private Equity

#### **Texas Municipal Retirement System**

Celisse Cobos, Investment Analyst – Private Equity

#### **Texas Permanent School Fund**

Kathryn Gernert, Senior Portfolio Manager

#### **Texas Trust Company**

Anca Ion, Chief Investment Officer of Internal Investments

#### **Tulane Investment Management Office**

Julia Mord, Deputy Chief Investment Officer

#### **UCLA Investment Company**

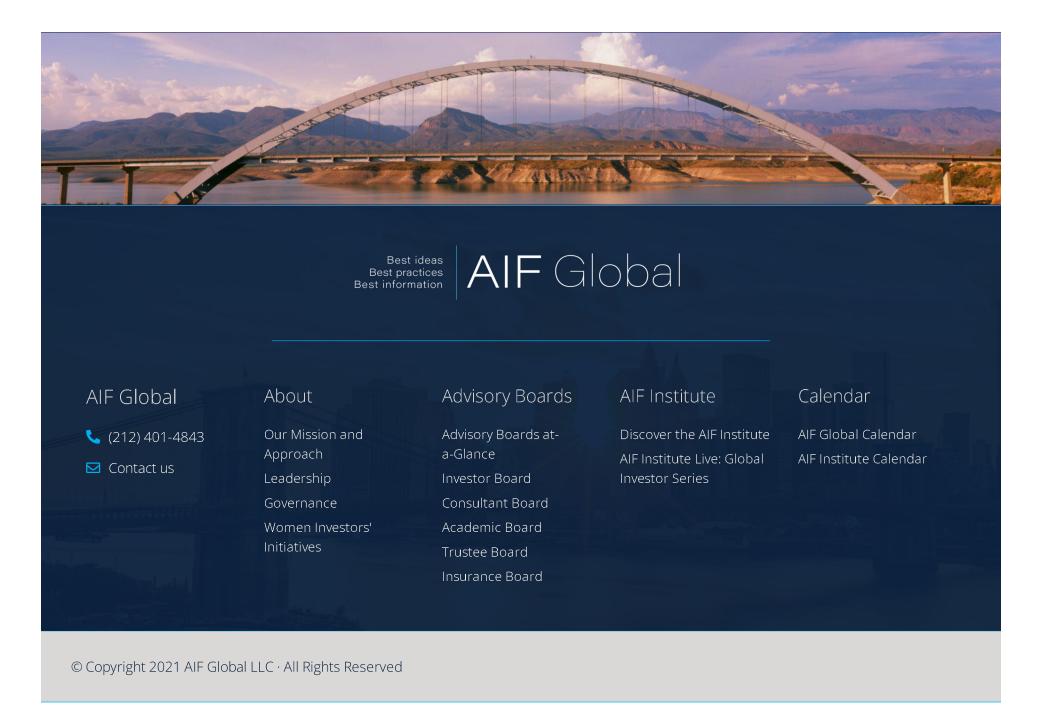
Breanne Eshelman, Investment Director Joe Bryant, Investment Director

#### **United Nations Joint Staff Pension Fund**

Elizabeth Caldas, Investment Officer, Private Equity

#### **VFMC**

Shali Lingaretnam, Acting Head of Investment Stewardship



#### ASSET ALLOCATION COMPARISON

#### September 30, 2021

				% Difference		1
		% of Total	Allocation	from	Prior Period Market	Prior Period
	Market Value	Fund	Policy	Allocation	Value	of Total Fun
EQUITY						
CHANNING CAPITAL	36,886,045.96	0.95			38,031,185.20	0.96
REDWOOD- SL	40,792,236.50	1.05			41,831,862.24	1.05
SYSTEMATIC	75,543,434.72	1.94			77,472,485.10	1.95
Total Small Cap	153,221,717.18	3.94			157,335,532.54	3.96
SMITH GRAHAM	77,862,525.29	2.00			79,553,868.23	2.00
T. ROWE PRICE	162,285,014.04	4.17			169,752,194.35	4.27
					, ,	
Total Domestic/Enhanced equity	240,147,539.33	6.17			249,306,062.58	6.27
NTGI S&P 500 EQUITY INDEX	175,791,745.35	4.52			184,367,736.35	4.64
Total Index	175,791,745.35	4.52			184,367,736.35	4.64
Total Domestic	569,161,001.86	14.63	12.50	2.13	591,009,331.47	14.87
ADELANTE CAPITAL	81.875.563.09	2.11			85,869,129.19	2.16
CENTERSQUARE-SL	81,020,773.92	2.08			85,585,193.67	2.15
Total REITS	162,896,337.01	4.19	2.50	1.69	171,454,322.86	4.31
AEW PARTNERS	4,586,166.00	0.12			2,356,696.00	0.06
HEITMAN	86,497,835.06	2.22			86,497,835.06	2.18
INVESCO	70,053,501.00	1.80			70,426,334.00	1.77
INVESCO - SL	72,516,458.82	1.86			72,516,458.82	1.82
VIRTUS REAL ESTATE CAP	15,607,313.00	0.40			15,607,313.00	0.39
Total Real Estate	249,261,273.88	6.40	7.50	-1.10	247,404,636.88	6.22
FAIRVIEW CAPITAL	66,920,840.00	1.72	7.00	7.70	61,415,345.00	1.55
	147.355.501.00	3.79			, ,	3.71
GROSVENOR GCM - CFIG HAMILTON LANE	111,814,869.00	2.87			147,355,501.00	2.54
	326,091,210.00	8.38	7.50	0.88	101,150,713.00	7.80
Total Private Equity	· · ·		7.50	0.00	309,921,559.00	
ACADIAN	137,870,094.30	3.54			144,579,571.30	3.64
AQR CAPITAL	130,565,088.22	3.36			135,913,996.08	3.42
ATIVO	42,724,835.02	1.10			44,478,316.89	1.12
BAILLIE GIFFORD	88,942,939.83	2.29			94,430,710.05	2.38
EARNEST PARTNERS	99,036,084.82	2.55			100,983,909.72	2.54
Total International	499,139,042.19	12.84	12.50	0.34	520,386,504.04	13.10
			12.00	0.54		
ARIEL	113,972,823.41	2.93			118,938,357.61	2.99
NORTHERN TRUST INTL EQ ACWI INDEX	27,501,920.88	0.71			28,687,027.04	0.72
WELLINGTON MGMT	140,564,630.93	3.61			145,249,209.90	3.65
Total Global Equity	282,039,375.22	7.25	7.50	-0.25	292,874,594.55	7.36
ACADIAN-LVG	238,753,596.48	6.14			247,246,410.77	6.22
BLACKROCK	240,292,356.81	6.18			249,083,921.97	6.27
Total Global Low Volatility Equity	479,045,953.29	12.32	12.50	-0.18	496,330,332.74	12.49
ATLANTIC TRUST	77,763,100.61	2.00			75,103,721.07	1.89
HARVEST FUND	77,664,633.27	2.00			74,193,194.82	1.87
COHEN & STEERS	65,406,997.32	1.68			68,189,050.02	1.72
Total Global Listed Infratructure	220,834,731.20	5.68	5.00	0.68	217,485,965.91	5.48
Total Marketable Alternatives	-	0.00	2.50	-2.50	-	0.00
TOTAL EQUITY	2,788,468,924.65	71.70	70.00	1.70	2,846,867,247.45	71.63
TOTAL EQUIT	2,100,400,024.00		1 0.00	•	2,040,001,241.40	700
FIXED INCOME						
ABERDEEN ASSET MGMT	147,182.65	0.00			147,179.79	0.00
GARCIA HAMILTON	66,590,879.76	1.71			67,116,001.16	1.69
NT COLLECTIVE AGGREGATE BOND INDEX FUND	221,499,870.74	5.70			223,400,312.36	5.62
SECURIAN ASSET MANAGEMENT	223,673,393.77	5.75	45.00	ا م د	225,440,259.33	5.67
Total Investment Grade	511,911,326.92	13.16	15.00	-1.84	516,103,752.64	12.98
NEUBERGER BERMAN	185,001,219.70	4.76			185,865,829.04	4.68
Total Opportunistic Credit	185,001,219.70	4.76	5.00	-0.24	185,865,829.04	4.68
BLACKROCK-HY	186,318,868.72	4.79			185,998,436.76	4.68
OAKTREE	189,058,702.75	4.86			188,326,037.28	4.74
	375,377,571.47	9.65	10.00	-0.35	374,324,474.04	9.42
Total High Yield						
CASH ACCOUNT	28,583,263.49	0.73			51,829,153.10	1.30
•		0.73 <i>0.7</i> 3	0.00	0.73	51,829,153.10 <b>51,829,153.10</b>	1.30 1.30

TOTAL FUND \$ 3,889,342,306.23 \$ 3,974,990,456.27

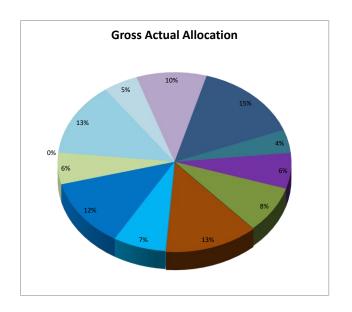
Market Value YE 2020 \$ 3,701,350,125.97 Market Value Variance

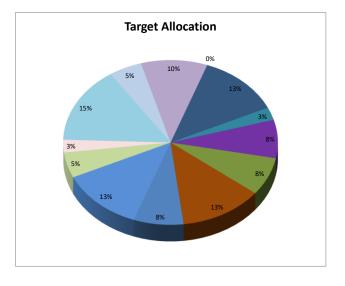
| Market Value Variance | Change from YE 2020: | \$ 187,992,180.26 | Change from prior month: \$ (85,648,150.04)

#### Asset Allocation: Actual vs. Target

September 30, 2021

	otember 30, 2021			% Difference
		Gross Actual	Target	from
	Market Value	Allocation	Allocation	Allocation
EQUITY	00 000 045 00	0.05		
CHANNING CAPITAL	36,886,045.96	0.95		
REDWOOD- SL	40,792,236.50	1.05		
SYSTEMATIC Total Service Control of the Control of	75,543,434.72	1.94		
Total Small Cap SMITH GRAHAM	153,221,717.18	3.94 2.00		
T. ROWE PRICE	77,862,525.29 162,285,014.04	4.17		
Total Domestic/Enhanced equity	240,147,539.33	6.17		
		4.52		
NTGI S&P 500 EQUITY INDEX  Total Index	175,791,745.35 175,791,745.35	4.52 4.52		
			10.50	
Total Domestic	569,161,001.86	14.63	12.50	2.
ADELANTE CAPITAL	81,875,563.09	2.11		
CENTERSQUARE-SL	81,020,773.92	2.08	0.50	
Total REITS	162,896,337.01	4.19	2.50	1.
AEW PARTNERS	4,586,166.00	0.12		
HEITMAN	86,497,835.06	2.22		
INVESCO SA	70,053,501.00	1.80		
INVESCO - SA	72,516,458.82	1.86 0.40		
VIRTUS REAL ESTATE CAP  Total Real Estate	15,607,313.00 249,261,273.88	0.40   6.40	7.50	-1.
			7.30	
FAIRVIEW CAPITAL	66,920,840.00	1.72		
GROSVENOR GCM - CFIG	147,355,501.00	3.79 2.87		
HAMILTON LANE	111,814,869.00 326,091,210.00	8.38	7.50	0.
Total Private Equity ACADIAN		3.54	7.50	U.
	137,870,094.30 130,565,088.22	3.36		
AQR CAPITAL ATIVO	42,724,835.02	1.10		
BAILLIE GIFFORD	88,942,939.83	2.29		
EARNEST PARTNERS	99,036,084.82	2.55		
Total International	499,139,042.19	12.84	12.50	0.
ARIEL	113,972,823.41	2.93		
NORTHERN TRUST INTL EQ ACWI INDEX	27,501,920.88	0.71		
WELLINGTON MGMT	140,564,630.93	3.61		
Total Global Equity	282,039,375.22	7.25	7.50	-0.
ACADIAN-LVG	238,753,596.48	6.14		
BLACKROCK	240,292,356.81	6.18		
Total Global Low Volatility Equity	479,045,953.29	12.32	12.50	-0.
ATLANTIC TRUST	77,763,100.61	2.00	.2.00	
HARVEST FUND	77,664,633.27	2.00		
COHEN & STEERS	65,406,997.32	1.68	1	
Total Global Listed Infratructure	220,834,731.20	5.68	5.00	0.
Total Marketable Alternatives	-	0.00	2.50	-2.
	0.700.400.004.05			
TOTAL EQUITY	2,788,468,924.65	71.70	70.00	1
FIXED INCOME				
ABERDEEN ASSET MGMT	147,182.65	0.00		
GARCIA HAMILTON	66,590,879.76	1.71		
NT COLLECTIVE AGGREGATE BOND INDEX FUND	221,499,870.74	5.70		
SECURIAN ASSET MANAGEMENT	223,673,393.77	<u>5.75</u>	45.00	
Total Investment Grade	511,911,326.92	13.16	15.00	-1.
NEUBERGER BERMAN	185,001,219.70	4.76		
	185,001,219.70	4.76	5.00	-0.
Total Opportunistic Credit		4.79		
BLACKROCK-HY	186,318,868.72			
BLACKROCK-HY OAKTREE	189,058,702.75	4.86		
BLACKROCK-HY OAKTREE Total High Yield		4.86 9.65	10.00	-0.
BLACKROCK-HY OAKTREE	189,058,702.75	4.86	10.00	-0.
BLACKROCK-HY OAKTREE Total High Yield	189,058,702.75 375,377,571.47	4.86 9.65	10.00 0.00	-0. 0.
BLACKROCK-HY OAKTREE Total High Yield CASH ACCOUNT	189,058,702.75 375,377,571.47 28,583,263.49	4.86 9.65 0.73		







# WILSHIRE

Wilshire Consulting



### Employees' Retirement Fund of the City of Dallas

Monthly Investment Summary

September 30, 2021



#### Wilshire

### MARKET COMMENTARY

Quarter Ended September 30, 2021

#### **U.S. Economy and Markets**

- The U.S. stock market, represented by the FT Wilshire 5000 Index<sup>SM</sup>, was up 0.14% for the third quarter of 2021.
- A slim majority of the eleven sectors were in positive territory, with Financials (+2.6%) and Utilities (+1.2%) representing the best performing sectors. The worst performing sector this quarter was Materials (-4.6%), which represents a relatively small segment of the U.S. market, with a weight of 2.3%.
- From a size perspective, large-cap outperformed small-cap during the quarter. While growth stocks outperformed value within the large-cap segment of the market, growth trailed value within small-cap.

#### **International Economy and Markets**

- Performance results within international equity markets were mixed during the third quarter, with developed markets generally positive (in local currency terms) against a meaningful drop within emerging markets. The main sources of weakness were South Korea (-13.2%) and China (-18.1%), the latter of which comprises one-third of the emerging market index.
- Economic conditions in the U.K. appear to be rapidly deteriorating. The Office for National Statistics said that the economy grew by just 0.1% in July, hampered by supply-chain issues and Covid-19 infections. At the same time, inflation has spiked, with consumer prices in the U.K. rising 3.2% in August.
- Germany, Europe's largest economy, is also facing a slowdown while the country's Ifo Index, which measures the business climate, fell for the third month in a row in September. Angela Merkel is set to step down as chancellor after 16 years following an election held just before quarter-end.
- Problems in China include an over-indebted real estate market where a slowdown could result in a drop in personal consumption and property investment.

#### **Fixed Income & Real Assets**

- The U.S. Treasury yield curve was up, generally, during the quarter, with yields in the 3- to 10-year maturity range rising the most. The 10-year Treasury yield ended the quarter at 1.49%, up two basis points from June.
- Credit spreads widened, with the spread on the broad high yield market closing the quarter at 2.89%.
- The FOMC met twice during the quarter, as scheduled, with no change to their overnight rate. Through the Fed's "dot plot," they are messaging that the current intent is for a 25 basis point increase in the overnight rate before the end of 2022. Their median forecast for year-end 2023 is for a Fed funds rate of 1.0%.
- Real estate securities were up during the third quarter in the U.S. but down abroad. Gains by sector were led by Apartments (+7.8%) and Residential (+6.7%). Laggards were generally found in the Factory Outlets (-12.7%), Hotels (-2.6%) and Health Care (-2.5%) sectors.
- Commodity results were positive for the quarter, as crude oil was up 2.1% to \$75.03 per barrel. There was some weakness elsewhere in commodity markets, however, particularly within metals and agriculture. Natural gas prices were up 60.7% during the third quarter, ending at \$5.87 per million BTUs. Natural gas prices are now up 125% during the past six months. Midstream energy fell after three strong quarters.
- Finally, gold prices were down -0.9% and finished at approximately \$1,755 per troy ounce.

#### Wilshire

### **W** Wilshire

# Monthly Index Performance Periods Ended September 30, 2021

			Perform	ance (%)		
	1	QTD	YTD	1	3	5
110 5 11	Month			Year	Years	Years
U.S. Equity	4.40	0.44	45.00	22.25	40.40	47.04
Wilshire 5000 Total Market TR Index	-4.43	0.14	15.62	32.35	16.19	17.01
S&P 500	-4.65	0.58	15.92	30.00	15.99	16.90
Wilshire 4500 Completion Index	-3.50	-1.77	14.05	46.33	16.51	16.95
MSCI USA Minimum Volatility Index	-4.97	0.26	9.60	17.19	11.11	12.45
U.S. Equity by Size/Style						
Wilshire U.S. Large-Cap Index	-4.60	0.45	15.61	30.86	16.72	17.59
Wilshire U.S. Large-Cap Growth Index	-5.26	1.27	15.51	30.26	20.87	21.56
Wilshire U.S. Large-Cap Value Index	-3.73	-0.62	14.72	30.35	11.97	12.60
Wilshire U.S. Small-Cap Index	-2.71	-2.97	15.39	51.11	11.17	13.36
Wilshire U.S. Small-Cap Growth Index	-3.33	-3.77	8.20	40.37	12.99	15.64
Wilshire U.S. Small-Cap Value Index	-1.72	-1.81	23.31	63.01	9.40	10.65
Wilshire U.S. Micro-Cap Index	-3.18	-6.12	24.94	64.85	9.50	12.94
Non-U.S. Equity (USD)						
MSCI AC World ex USA (Net)	-3.20	-2.99	5.90	23.92	8.03	8.94
MSCI ACWI ex USA Minimum Volatility Index (Net)	-2.62	0.68	6.62	15.27	5.37	6.26
MSCI EAFE Index (Net)	-2.90	-0.45	8.35	25.73	7.62	8.81
MSCI Emerging Markets (Net)	-3.97	-8.09	-1.25	18.20	8.58	9.23
MSCI AC World ex USA Small Cap (Net)	-3.04	0.00	12.23	33.06	10.33	10.28
U.S. Fixed Income						
Blmbg. U.S. Aggregate	-0.87	0.05	-1.56	-0.90	5.35	2.94
Blmbg. U.S. Treasury: Long	-2.86	0.47	-7.49	-10.27	9.22	3.31
Blmbg. U.S. Long Corporate Index	-1.90	-0.12	-2.55	2.46	10.54	6.32
Blmbg. U.S. TIPS	-0.72	1.75	3.51	5.19	7.45	4.34
Blmbg. U.S. Credit Index	-1.07	-0.03	-1.30	1.45	7.10	4.37
Blmbg. U.S. Corp: High Yield	-0.01	0.89	4.53	11.28	6.91	6.52
S&P LSTA Leverage Loan Index	0.64	1.10	4.35	8.33	4.12	4.57

### **W** Wilshire

### **Asset Allocation & Performance**

Dallas Total Fund Periods Ended September 30, 2021

			Per	forman	ce (%) ı	net of fe	es		Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Global Equity Composite	-3.70	-1.89	8.93	22.10	10.19	12.09	10.25	9/1/2012	282,039,375	7.25
Global Low Volatility Composite	-3.48	0.21	8.28	16.07	6.79	8.26	8.37	7/1/2015	479,045,953	12.32
Domestic Equity Composite	-3.70	-0.14	18.47	41.19	14.30	15.73	10.72	1/1/1990	569,161,002	14.64
International Equity Composite	-4.07	-3.49	8.39	27.90	9.94	10.49	6.03	1/1/1990	499,139,042	12.84
Global Fixed Income Composite	-0.81	0.07	-0.83	0.74	5.82	3.52	5.02	10/1/1995	511,911,327	13.16
High Yield Composite	0.28	1.10	4.29	10.37	6.43	5.88	6.52	1/1/1997	375,377,571	9.65
Credit Opportunities Composite	-0.46	0.44	2.94	8.88	5.50	5.22	6.63	2/1/2016	185,001,220	4.76
Total Real Estate Composite	-2.04	0.62	12.32	17.71	7.41	6.11	6.67	1/1/1990	411,041,193	10.57
Global Listed Infrastructure Composite	1.54	-0.75	27.94	49.71	-5.00	-2.04	3.19	1/1/2012	220,834,731	5.68
Private Equity Composite	3.52	16.39	26.43	34.46	15.46	14.64	13.88	6/1/2009	326,419,052	8.39
Managed Short Term Composite	0.01	0.02	0.04	0.07	1.18	1.16	2.79	1/1/1990	28,583,263	0.74
Dallas Total Fund Policy Index	-1.74 -2.15	0.73 0.01	10.49 9.90	20.94 21.17	8.26 8.88	8.41 8.52	9.10 9.70	1/1/1985	3,888,553,730	100.00



### **Asset Allocation & Performance**

Dallas Total Fund

			Per	forman	ce (%)	net of fe	ees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Systematic Financial	-2.49	-2.97	20.62	54.75	8.34	12.66	11.22	8/1/2003	75,543,435	13.27
Russell 2000 Index	-2.95	-4.36	12.41	47.68	10.54	13.45	10.25			
Redwood Investments *	-2.49	0.98	18.00	44.00	16.00	15.41	15.41	10/1/2016	40,792,237	7.17
Russell 2000 Growth Index	-3.83	-5.65	2.82	33.27	11.70	15.34	15.34			
Channing Capital *	-3.01	-2.39	14.05	54.48	8.85	10.84	8.46	12/1/2013	36,886,046	6.48
Russell 2000 Value Index	-2.00	-2.98	22.92	63.92	8.58	11.03	8.64			
Domestic Equity Small Cap Composite	-2.61	-1.81	18.23	51.68	10.58	13.13	10.41	6/1/2003	153,221,717	26.92
Smith Graham *	-2.13	-0.34	29.56	67.86	11.59		10.62	1/1/2018	77,862,525	13.68
Russell Midcap Index	-4.12	-0.93	15.17	38.11	14.22		13.37			
T. Rowe Price	-4.40	0.77	15.63	31.22	16.73	17.69	10.88	4/1/2006	162,285,014	28.51
S&P 500	-4.65	0.58	15.92	30.00	15.99	16.90	10.30		, ,	
Northern Trust S&P 500 (Lending)	-4.65	0.58	15.92	30.00	15.96	16.87	10.86	1/1/1995	175,791,745	30.89
S&P 500	-4.65	0.58	15.92		15.99	16.90	10.82			
Domestic Equity Composite	-3.70	-0.14	18.47	41.19	14.30	15.73	10.72	1/1/1990	569,161,002	100.00
Custom Benchmark	-4.43	0.14	15.62	32.35	16.19	17.01	10.85			

### **W** Wilshire

### **Asset Allocation & Performance**

Dallas Total Fund

			Per	formar	nce (%)	net of fo	ees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Adelante Capital Management	-4.65	2.45		40.62	12.78	8.56	10.25	10/1/2001	81,875,563	19.92
Wilshire U.S. Real Estate Securities Index	-5.09	1.64	24.72	38.09	10.34	7.11	10.31			
CenterSquare	-5.33	1.15	23.47	38.26	11.58		12.30	6/1/2018	81,020,774	19.71
Wilshire U.S. Real Estate Securities Index	-5.09	1.64	24.72	38.09	10.34		10.93			
REIT Composite	-4.99	1.80	25.13	39.44	12.18	8.07	10.31	10/1/2001	162,896,337	39.63
Wilshire U.S. Real Estate Securities Index	-5.09	1.64	24.72	38.09	10.34	7.11	10.31			
Heitman America Real Estate Trust, LP	0.00	0.00	6.45	8.16	2.09	4.10	8.99	12/1/2010	85,798,309	20.87
NCREIF ODCE NOF	0.00	0.00	5.64	6.80	3.95	5.24	9.18	12/1/2010	83,796,309	20.07
Invesco Core Real Estate USA, LLC	0.00	0.00	6.41	8.16	4.50	6.24	9.66	12/1/2010	72,099,567	17.54
NCREIF ODCE NOF	0.00	0.00	5.64	6.80	3.95	5.24	9.18			
Virtus Real Estate Capital III	0.00	-0.88					16.30	2/1/2021	15,607,313	3.80
NCREIF ODCE NOF	0.00	0.00					5.64			
AEW Partners Real Estate Fund IX	0.00	2.46					-27.36	4/1/2021	4,586,166	1.12
NCREIF ODCE NOF	0.00	0.00					3.68			
Private Core Real Estate Composite	0.00	-0.05	5.59	6.20	4.54	5.03	8.78	10/1/2010	248,144,856	60.37
Custom Benchmark	0.00	0.00	4.75	5.28	4.92	5.18	8.32	10/1/2010	270,144,030	00.57
Total Real Estate Composite	-2.04	0.62	12.32	17.71	7.41	6.11	6.67	1/1/1990	411,041,193	100.00
Custom Benchmark	-2.54	0.89	14.50	20.95	8.18	6.54	8.61			

#### **Employees' Retirement Fund of the City of Dallas**



Private Equity & Direct Private Real Estate Monthly Performance and Market Value Summary

Periods Ended 09/30/21

	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple <sup>3</sup>
Invesco II	70,053,501	65,188,333	65,188,333	9,202,934	Jan-14	4.0%	1.2
Total Direct Private Real Estate	70,053,501	65,188,333	65,188,333	9,202,934	Jan-14	4.0%	1.2
	Month-End Market Value	Commitment Value	Drawn Down Capital	Cash Distributions	Inception Date	IRR Since Inception	Multiple <sup>3</sup>
Hamilton Lane Secondary Fund II	498,599	25,000,000	22,058,532	31,007,605	Jul-09	13.5%	1.4
Hamilton Lane Secondary Fund III	5,973,015	30,000,000	23,372,292	25,387,382	Nov-12	10.4%	1.3
Hamilton Lane Secondary Fund IV	24,524,072	30,000,000	25,907,343	17,076,274	Mar-17	23.9%	1.6
Hamilton Lane Secondary Fund V	36,905,593	40,000,000	29,795,744	2,124,965	Mar-20	53.9%	1.3
Hamilton Lane Fund VII Composite	22,818,114	50,000,000	45,600,834	47,574,317	Jan-10	6.7%	1.5
Hamilton Lane Fund VIII (Global)	21,423,318	30,000,000	22,162,244	9,635,728	Nov-12	7.0%	1.4
GCM Grosvenor - Partnership, L.P.	36,224,498	75,000,000	85,868,430	106,904,598	Jun-11	14.2%	1.7
GCM Grosvenor - Partnership II, L.P. (2014)	43,536,158	60,000,000	69,559,751	52,696,583	Jul-14	14.4%	1.4
GCM Grosvenor - Partnership II, L.P. (2015)	45,886,269	30,000,000	34,423,858	9,770,143	Dec-15	16.4%	1.6
GCM Grosvenor - Partnership II, L.P. (2017)	20,047,408	30,000,000	19,501,710	3,376,212	Jan-18	8.9%	1.2
GCM Grosvenor - Advance Fund, L.P.	1,661,168	10,000,000	1,359,265	-	Jun-21	-	1.2
Fairview Capital - Lone Star Fund I	49,478,435	40,000,000	35,513,040	9,273,654	Aug-15	17.3%	1.7
Fairview Capital - Lone Star Fund II	15,747,851	30,000,000	12,797,793	107,274	Dec-18	7.7%	1.2
Fairview Capital - Lone Star Fund III	1,694,554	25,000,000	1,769,971	-	Apr-21	-5.4%	1.0
<b>Total Private Equity Composite</b>	326,419,052	505,000,000	429,690,806	314,934,734	Jul-09	13.7%	1.5

Public Market Equivalent (PME) <sup>2</sup> 486,595,003 18.8%

<sup>\*</sup> Next Generation Manager

<sup>&</sup>lt;sup>1</sup> Total Value to Paid-in Capital ("TVPI") multiple calculation = (market value + distributions) / capital called

<sup>&</sup>lt;sup>2</sup> The Public Market Equivalent (PME) approach creates a hypothetical investment vehicle that mimics the private equity composite cash flows. The performance difference between the PME vehicle and the private equity portfolio is determined by their net asset value (NAV) at the end of the benchmarking period. The performance of the "public market" is simulated using the monthly S&P 500 index returns, plus a 300 BPs annual hurdle rate.

<sup>&</sup>lt;sup>3</sup> Private Equity cash account

### **W** Wilshire

### **Asset Allocation & Performance**

Dallas Total Fund

			Per	forman	ce (%)	net of fe	es		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian International	-4.64	-3.46	15.14	35.64	10.11	11.88	8.82	4/1/1989	137,870,094	27.62
Custom Benchmark	-3.04	0.00	12.23	33.06	10.33	10.28	6.48			
Ativo International *	-3.94	-0.35	10.28	21.10	6.27		5.08	1/1/2018	42,724,835	8.56
MSCI EAFE Index (Net)	-2.90	-0.45	8.35	25.73	7.62		5.65			
AQR Capital Management	-3.89	-5.10	5.33	21.76	7.43	8.62	4.28	4/1/2006	130,565,088	26.16
Custom Benchmark	-3.20	-2.99	5.90	23.92	8.03	8.94	3.90			
Baillie Gifford	-5.81	-5.14	0.52	16.16			17.35	4/1/2019	88,942,940	17.82
MSCI AC World ex USA (Net)	-3.20	-2.99	5.90	23.92			10.75			
Earnest Partners	-1.93	-1.14	10.79	42.33			13.76	4/1/2019	99,036,085	19.84
MSCI AC World ex USA (Net)	-3.20	-2.99	5.90	23.92			10.75			
BlackRock ACWI Ex U.S.										0.00
International Equity Composite	-4.07	-3.49	8.39		9.94	10.49	6.03	1/1/1990	499,139,042	100.00
Custom Benchmark	-3.18	-2.56	6.77	25.16	8.34	9.13	4.98			



### **Asset Allocation & Performance**

Dallas Total Fund

			Per	forman	ice (%)	net of fe	es		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Ariel Global *	-4.17	-3.46	6.84	17.98	6.34		6.86	1/1/2018	113,972,823	40.41
MSCI AC World Index (Net)	-4.13	-1.05	11.12	27.44	12.58		11.05			
Wellington	-3.22	-0.72	10.17	24.38	12.97	13.55	13.13	9/1/2012	140,564,631	49.84
MSCI AC World Index (Net)	-4.13	-1.05	11.12	27.44	12.58	13.20	11.21			
Northern Trust Global Equity	-4.13	-1.25	11.42	28.90	12.83	13.49	13.37	10/1/2015	27,501,921	9.75
MSCI AC World IMI (Net)	-3.99	-1.11	11.42	28.92	12.38	13.06	12.93			
Global Equity Composite	-3.70	-1.89	8.93	22.10	10.19	12.09	10.25	9/1/2012	282,039,375	100.00
MSCI AC World Index (Net)	-4.13	-1.05	11.12	27.44	12.58	13.20	11.21			



### **Asset Allocation & Performance**

Dallas Total Fund

		Performance (%) net of fees								on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Acadian Global Low Vol.	-3.43	0.30	9.20	17.78	6.05	7.84	7.89	7/1/2015	238,753,596	49.84
MSCI AC World Index (Net)	-4.13	-1.05	11.12	27.44	12.58	13.20	10.67			
MSCI ACWI Minimum Volatility Index (Net)	-3.56	0.08	7.20	14.08	7.55	8.48	8.56			
BlackRock Global Low Vol.	-3.53	0.12	7.39	14.42	7.52	8.68	8.83	7/1/2015	240,292,357	50.16
MSCI ACWI Minimum Volatility Index (Net)	-3.56	0.08	7.20	14.08	7.55	8.48	8.56			
Global Low Volatility Composite	-3.48	0.21	8.28	16.07	6.79	8.26	8.37	7/1/2015	479,045,953	100.00
MSCI ACWI Minimum Volatility Index (Net)	-3.56	0.08	7.20	14.08	7.55	8.48	8.56			



### **Asset Allocation & Performance**

Dallas Total Fund

			Per	forman	ce (%)	net of fe	es		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Atlantic Trust CIBC	3.54	-1.32	36.93	71.73	-1.44	-0.14	4.51	1/1/2012	77,763,101	35.21
Alerian MLP Index	3.02	-5.71	39.40	84.63	-4.32	-2.42	-0.32			
Harvest Fund Advisors MLP	4.68	-0.71	38.99	70.24	0.02	1.26	4.38	1/1/2012	77,664,633	35.17
Alerian MLP Index	3.02	-5.71	39.40	84.63	-4.32	-2.42	-0.32			
C&S Global Listed Infrastructure	-4.08	-0.11	8.10				16.77	11/1/2020	65,406,997	29.62
FTSE Global Core Infrastructure 50/50 (Net)	-3.66	-0.25	6.83				16.68			
Global Listed Infrastructure Composite	1.54	-0.75	27.94	49.71	-5.00	-2.04	3.19	1/1/2012	220,834,731	100.00
Global Listed Infrastructure Benchmark	1.35	-4.26	30.85	67.23	-7.42	-4.33	-1.33			



### **Asset Allocation & Performance**

Dallas Total Fund

			Per	forma	nce (%)	net of	fees		Allocati	on
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Securian Asset Management	-0.78	0.16	-0.11	1.76	5.54	3.59	4.64	7/1/2007	223,673,394	43.69
Blmbg. U.S. Aggregate	-0.87	0.05	-1.56	-0.90	5.35	2.94	4.23			
Garcia Hamilton *	-0.78	-0.09	-2.14	-1.43	4.42	2.76	3.46	11/1/2013	66,590,880	13.01
Blmbg. U.S. Aggregate	-0.87	0.05	-1.56	-0.90	5.35	2.94	3.28			
NT Collective Aggregate Bond Index	-0.85	0.07					0.07	7/1/2021	221,499,871	43.27
Blmbg. U.S. Aggregate	-0.87	0.05					0.05			
Aberdeen Global Fixed Income									147,183	0.03
									,	
Global Fixed Income Composite	-0.81	0.07	-0.83	0.74	5.82	3.52	5.02	10/1/1995	511,911,327	100.00
Blmbg. U.S. Aggregate	-0.87	0.05	-1.56	-0.90	5.35	2.94	5.06			



### **Asset Allocation & Performance**

Dallas Total Fund

	Performance (%) net of fees									Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%	
Neuberger Berman	-0.46	0.44	2.94	8.88	5.50	5.22	6.63	2/1/2016	185,001,220		
Custom Benchmark	-0.46	0.46	2.57	8.07	5.50	4.97	6.73				



### **Asset Allocation & Performance**

Dallas Total Fund

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Oaktree Capital Management	0.39	1.01	4.27	10.79	6.03	5.53	6.70	2/1/1997	189,058,703	50.36
FTSE High Yield Cash Pay	0.05	0.95	4.52	11.22	6.47	6.20	6.86			
BlackRock	0.17	1.19	4.31	9.96	6.82	6.22	6.51	10/1/2006	186,318,869	49.64
FTSE High Yield Cash Pay	0.05	0.95	4.52	11.22	6.47	6.20	6.94			
High Yield Composite	0.28	1.10	4.29	10.37	6.43	5.88	6.52	1/1/1997	375,377,571	100.00
FTSE High Yield Cash Pay	0.05	0.95	4.52	11.22	6.47	6.20	6.87			



### **Asset Allocation & Performance**

**Dallas Total Fund** 

	Performance (%) net of fees								Allocation	
	1 Month	1 Quarter	YTD	1 Year	3 Years	5 Years	Since Inception	Inception Date	Market Value \$	%
Cash Account	0.01	0.02	0.04	0.07	1.18	1.16	3.14	1/1/1988	28,583,263	100.00
Managed Short Term Composite	0.01	0.02	0.04	0.07	1.18	1.16	2.79	1/1/1990	28,583,263	100.00

## At A Glance

### For period ended September 30, 2021

	20	020		20	21	
Retirements	This Month		YTD	This Month		YTD
Age	15		141	14		155
Service	1		19	0		14
Rule of 78	10		78	7		82
QDRO	<u>0</u>		<u>6</u>	<u>0</u>		<u>2</u>
Total	26		244	21		253
Disability Retirements						
Service	0		0	0		0
Non-service	<u>0</u>		<u>3</u> 3	<u>0</u>		<u>3</u> 3
Total	<u>o</u>		3	0		3
Benefits Paid	\$ 24,163,197.15	\$	214,700,137.63	\$ 24,604,967.91	\$	221,344,645.96
Refunds Number of refunds	\$ 771,054.93 39	\$	5,011,184.63 331	\$ 1,160,860.06 58	\$	8,084,836.96 501
*Contributions	\$ 9,039,568.39	\$	91,504,011.19	\$ 9,478,190.51	\$	87,159,955.44

Jan Feb Mar	7,534 7,584	Disabilities 151 151	7,280	Tier A actives 4,762	Actives <b>2,518</b>
Feb	7,584			4,762	2,518
	,	151			
Mar			7,268	4,706	2,562
	7,547	148	7,258	4,655	2,603
April	7,562	145	7,263	4,622	2,641
May	7,588	144	7,277	4,576	2,701
June	7,597	143	<b>7,266</b>	4,530	2,706
July	7,612	143	7,285	4,504	2,781
Aug	7,630	143	7,240	4,462	2,778
Sep	7,634	142	7,275	4,422	2,853

Nov

